

Research Activity Panel Meeting Summary
Chris Harrold, Monterey Bay Aquarium, RAP Chair

FEBRUARY 2003 RAP MEETING

Host: Monterey Bay Aquarium
Friday, February 14, 2003 9am to 12pm

In Attendance:

Members:

Chris Harrold, Monterey Bay Aquarium
Andrew DeVogelaere, MBNMS, RAP Coordinator
Greg Cailliet, MLML
William Douros, MBNMS
Deborah Johnston, CA DFG/Monterey
Steve Moore, CSUMB
Leslie Rosenfield, NPS
Rick Starr, UC Sea Grant
Francisco Chavez, MBARI
Aaron King, MPA Center
Mark Stephenson, CDFG/Mar. Pollution Studies Lab
Jim Harvey, MLML
Gary Sharp, Center for Climate/Ocean Resources Study
Rebecca Goldman, ESNERR

Guests:

Jennifer Parkin, MBNMS
Steve Lonhart, MBNMS
Chad King, MBNMS
Josh Pederson, MBNMS
Sean Morton, MBNMS
Kenneth Coale, MLML
Tom Okey, Fisheries Center, Univ. of British Columbia
Jenny Hauser, MBNMS
Gerald Wheaton, NOAA Charting
Holly Price, MBNMS
Huff McGonigal, MBNMS
Dennis Long, Monterey Bay Sanctuary Foundation

PRESENTATIONS

Institutional Update: Monterey Bay Aquarium (Chris Harrold)

Chris gave an overview of Monterey Bay Aquarium's programs, mainly focusing on the research and conservation issues. The first program is southern sea otter research and conservation. The goals of this program are to foster collaborations with scientists, government agencies, funding agencies, etc., recovery based research and be a leader in the development of a national captive management strategy for southern sea otters. The second program is the tuna research and conservation center. The aquarium is collaborating with Stanford University to use the husbandry facility to raise tuna for exhibits as well as to use it for a research facility to test electronic and satellite tagging on tuna in captivity before attempting it in the wild. The goal of the third program, Tagging of Pacific Pelagics (TOPP), is to assess what has been in the ocean historically, what is there presently, and what will be there in the future. To learn more, go to the following web page: www.toppcensus.org. Also, Chris updated the RAP on the Seafood Watch program, Communication Partnership for Science and the Seas (ComPASS), and the AAAS, Marine Sessions (Strategic Media Outreach).

Center for Integrative Coastal Observation, Research, and Education: CI-CORE (Kenneth Coale)

This program was formed to provide a time series of temporal change and to provide a deployed backbone of in-water sensors linked with a series of hyperspectral over flights and high resolution bathymetry. Kenneth updated the RAP on the first few months of activity. In October, several over flights were performed using a PHILL'S camera. Ground truthing was done in conjunction and the results were quite promising. Oceanographic data were collected and spectrally characterized to show very different water masses in Monterey Bay as well as a red tide bloom off of Santa Cruz. These instruments are able to pick up reflective signals from various plants, which may increase our ability to age kelp forests remotely (different ages of kelp reflect in different spectral waves). Kenneth and Richard Zimmerman would like to have many collaborators with this project to merge several different technologies in the future. See MLML web site at (<http://www.mlml.calstate.edu/cicore> and <http://weathernew.mlml.calstate.edu>) for more information.

DISCUSSIONS

Constructing an Ecopath Model of Monterey Bay: The Concept and Potential Benefits (Tom Okey and Jim Harvey)

Ecopath modeling is a snapshot of flows through ecosystem. Each box in the model represents a way to characterize standing biomass, production rates of the group of interest, and consumption rates of the group of interest. This could be used as a potential process to develop an ecosystem function model for Monterey Bay. Also, it could be used to determine holes in data sets, integrated into a predictive model to help people in management decisions, as an educational tool, and to enhance collaboration with other fields of science (oceanographers, physicists, zoologists, etc.). One example of ecopath was developed for Prince William Sound. An Ecosim model (gives insights into system function) was used to express changes in trajectories on biomasses of organisms, such as the sea otter. By using these models one can draw a clearer

picture of the dynamics of a system. Ecopath modeling has a great potential for disseminating a lot of information to a lot of different people (educators, the public, scientists).

This presentation was made to the RAP to assess if the group saw value in developing this for the Monterey Bay/Sanctuary region. The RAP generally wants to pursue this effort. For more information or to let Tom and Jim the level of interest there is, please email them at: (t.okey@fisheries.ubc.ca and Harvey@mlml.calstate.edu).

INFORMATION ITEMS

OCEAN.US Coastal Observing Systems Workshop (Leslie Rosenfeld)

Francisco Chavez will be attending this meeting at the end of March. He would like to get together with interested parties on March 10th at MBARI to discuss information from this region that would be useful to present at the IOUS summit.

Update on the Monterey Bay Sanctuary Foundation (Dennis Long)

Dennis gave an update on the Foundation and to inform the RAP on administrative opportunities for regional research projects. Four years ago there were 12 projects and about \$500,000 budget; today there are over 40 projects and \$5 million pledged. Some of the highlights are: fiscal sponsorship, grant facilitation, SIMoN, Pt. Pinos tidepool project, resource protection projects, cooperative venture with agriculture and farm bureaus in Salinas Valley, collaborations with NMFS, MPA, and Coastal Commission. The Foundation has very low overhead costs. For more information please email Dennis at (lighthousegroup@earthlink.net).

SIMoN GIS Data Sources Review (Chad King)

Chad explained how SIMoN is trying to acquire data to put into the GIS system. The information of interest is what projects are going on in the region and who the Principal Investigators are. This information could then be released to the public. Please email Chad with any information you would like to share (chad.king@noaa.gov).

JMPR Update (Sean Morton and Holly Price)

Sean reviewed the dates for the management plan update. Draft JMPR plans should be ready by the end of April. On June 26th and 27th there will be staff presentations to the SAC Advisory Council. On July 30th there will be an evening public comment session. On July 31st and August 1st there will be all day meetings of the SAC Advisory Council to get a consensus and give recommendations to Sanctuary Staff.

Holly reviewed the “white paper” entitled: “Regulatory Coordination Between the National Marine Sanctuaries Program and Fishery Management Agencies” and other fishery issues. These included how to integrate fishing into education and research, and identifying studies that may be needed.

Update on California Harbors and Navigation Codes (Gerald Wheaton)

Updated harbor and navigation codes can be found on the California State website at (<http://www.leginfo.ca.gov/index.html/>).

Update on Sanctuary Currents 2003 (Jennifer Parkin)

Awards announcements:

Congratulations to Jim Estes for receiving the Ricketts Lecturer Award and to Jim Harvey for receiving the Science and Research Award.

A reminder about the upcoming Sanctuary Currents 2003 Symposium at CSUMB on March 15th.

NEW BUSINESS

Agenda Items for the Next Meeting

Greg would like to look more closely at the Ecopath Modeling (maybe in conjunction with SIMoN to figure out where data gaps might be). He suggested that Steve Lonhart to take lead on determining how to incorporate modeling into SIMoN. Greg suggested keeping ecosystem models on the RAP agenda so it stays “on the radar” for this year.

Other Suggestions for Future Meetings:

- (1) An update on the SCOPE project.
- (2) An update on the Center for Integrated Marine Technology.
- (3) An update on the March meeting to assess regional capabilities to support national monitoring initiatives.